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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/364,788

07/30/1999

BENJAMIN N. ELDRIDGE

P84-US

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10/17/2006

N. KENNETH BURRASTON

KIRTON & MCCONKIE

P.O. BOX 45120

SALT LAKE CITY, UT 84145-0120

EXAMINER

PRASAD, CHANDRIKA

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/364,788

Applicant(s)

ELDRIDGE ET AL.

Examiner

Chandrika Prasad

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 90-117 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 90-117 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The reply filed on 10/03/06 consists of cancellation of all previous claims 1-89, addition of new claims 90-117 and remarks related to rejection of previous related claims. The claims are not allowable as described below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 90-100, 103-114 and 117 are rejected under 35 U.S.C. 102(b) as being anticipated by Grabbe et al. (5152695).

Grabbe (Figures 1-18) shows an electronic component comprising a substrate (a semiconductor device) 14 including a plurality of conductive areas 12 and a plurality of resilient conductive contact structures (metal layers) 10, each having a base portion 20 coupled to the conductive areas and a tip portion 28 displaced from the substrate and the base portion and a beam portion 22 between the base portion and the tip portion wherein a width of a length of the beam portion decreases along its length from the base portion to the tip portion. The substrate has a conductive layer coupling the conductive areas to internal circuitry and a passive layer on the surface of the substrate with openings 42 at the conductive areas which forms a plurality of terminals electrically connected to the conductive areas. The tip portion comprises a pointed end 26. The

contact structures are spaced 0.001 meters apart which is between 2.5 micron (0.00000025 meters) and 2000 micron (0.002 meters). The tip portion has a beveled edge and the beam portion is triangular in shape. The beam portion has a linear slope from the base to the tip. Grabbe further shows an electronic system with the conductive contact structures 14 between two substrates 14 and 46 (see Figure 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 101, 102, 115 and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabbe et al. (5152695).

Grabbe shows all the features of these claims except the tip being rectangular or quadrilateral in shape. Such shapes are well known in the art of electrical connectors. The applicant has not provided any specific reasons or problems to be solved by having these shapes. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to select such shapes from one of numerous configurations because such a selection is generally recognized as being within the level of ordinary skill in the art.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

8. Any correspondence to this action may be mailed to:

**Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad whose telephone number is (571) 272-2099. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached at (571) 272-2800 ext 39. The fax number is 571-273-8300.

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Art Unit: 2839

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A handwritten signature in black ink, appearing to read 'Chandrika Prasad', written in a cursive style.

Chandrika Prasad
Primary examiner
October 12, 2006